

## REMARKS

Applicants appreciate the detailed examination evidenced by the Office Action mailed October 22, 2008 (hereinafter "Office Action"). Applicants respectfully submit that the pending claims are in compliance with 35 U.S.C. § 101 for at least the reasons discussed herein. Applicants have amended the claims as set out above. Accordingly, Applicants respectfully submit that the pending claims are patentable over the cited references for at least the reasons discussed herein.

### The Section 101 Rejections

Claims 1-39 stand rejected under 35 U.S.C. § 101 because the claimed invention is not directed to statutory subject matter. *See* Office Action, pages 2-3. Applicants will address these claims separately below.

With respect to independent Claim 1, Applicants have amended Claim 1 to recite "A computer implemented method." Applicants submit that such a claim to a computer implemented method necessarily includes computer hardware and an interrelationship between computer software and hardware exists with respect to Claim 1. The assertion in the Office Action that Claim 1 "could simply be performed by mental process alone" is clearly unsupported based on this clear interrelationship of computer hardware and software. In other words, even if the recitations of Claim 1 could be software only, a software readable database must be available to the "software only" module, *i.e.*, stored on a computer that executes the "software only" and an interface to a user must be provided, such as a keyboard or the like. Accordingly, Applicants request withdrawal of the Section 101 rejections of Claim 1 and the claims depending therefrom for at least the foregoing reasons.

With respect to Claims 8, 15, 22 and 39, the Office Action states that these claims are directed to a "program per se." *See* Office Action, page 3. However, each of these claims recites "a computer readable medium having computer readable program code embodied therein." As stated in the Manual of Patent Examining Procedure (MPEP):

**When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory** in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)(discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer

readable medium that increases computer efficiency) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

M.P.E.P. § 2106.1 (emphasis added). Likewise, the Patent Office has expressly recognized that computer program product claims such as the present Claims 8, 15, 22 and 39, are directed to statutory subject matter. *See In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). Accordingly, Applicants respectfully submit that the rejections under Section 101 with respect to Claims 8, 15, 22 and 39 should be withdrawn for at least these reasons.

### **The Section 102 Rejections**

A. Claims 9, 10, 15 and 51 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,944,877 to Lord (hereinafter "Lord"). *See* Office Action, page 3. Applicants respectfully submit that many of the recitations of these claims are neither disclosed nor suggested by Lord. For example, amended independent Claim 9 recites:

A method of displaying a video stream containing commercial advertising portions and primary content portions on a television at a residence, comprising:  
**detecting a commercial advertising portion of the video stream; and**  
**replacing the detected commercial advertising portion of the video stream**  
**with a video stream from a source component located at the residence so as to**  
**provide a composite video stream containing primary content portions and at**  
**least one locally generated portion, wherein the locally generated portion is not**  
**an advertisement.**

Independent Claim 51 contains corresponding system recitations. Applicants respectfully submit that at least the highlighted recitations of Claim 9 are neither disclosed nor suggested by Lord for at least the reasons discussed herein.

The Office Action points to column 2, lines 13-33 of Lord as teaching all the recitations of Claim 9. *See* Office Action, page 4. Applicants respectfully disagree. The cited portion of Lord states:

To address the above-discussed deficiencies of the prior art, it is a primary object of the present invention to provide an addressable advertising system comprising: 1) receiver circuitry capable of receiving an incoming television signal from an external source or a local **recorded source (e.g., VCR, DVD, and the like)**, generating

therefrom a original baseband video signal, and transmitting the original baseband video signal to a display associated with the addressable advertising system; 2) a local storage device coupled to the receiver circuitry capable of storing a plurality of **replacement video advertisements**; and 3) an advertisement controller coupled to the receiver circuitry and the local storage device capable of detecting a first swap control signal transmitted in the incoming television signal, wherein the advertisement controller, in response to the detection, causes the receiver circuitry to receive from the local storage device a first selected replacement video (or audio or multimedia) **advertisement** and wherein the receiver circuitry generates therefrom a replacement baseband video signal and transmits the replacement baseband video signal to the display.

Lord, column 2, lines 13-33 (emphasis added). In other words, Lord discusses locally storing video advertisements to conserve the bandwidth needed to provided targeted advertising to each user. Lord is specifically directed to advertising. *See* Lord, Background of the Invention. In stark contrast, Claim 9 recites detecting a commercial advertising portion of **the video stream** and replacing the detected commercial advertising portion of **the video stream with a video stream** from a source component located at the residence so as to provide **a composite video** stream containing primary content portions and at least one locally generated portion, **wherein the locally generated portion is not an advertisement**. Nothing in Lord discusses replacing a commercial advertising portion of a video stream with a locally generated video stream that is not an advertisement, for example, a local camera output (Claim 10) or a baby monitor (Claim 11). Accordingly, Applicants respectfully submit that independent Claim 9 and the claims that depend therefrom are patentable over the Lord for at least the reasons discussed herein.

Independent Claim 51 contains corresponding system recitations to the recitations of independent Claim 9. Accordingly, Applicants respectfully submit that independent Claim 51 is patentable over Lord for at least the reasons discussed above with respect to independent Claim 9.

B. Claims 16, 18-23, 25-28, 52, and 53 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent Publication No. 2002/0147638 to Banerjee (hereinafter "Banerjee"). *See* Office Action, page 4. Applicants respectfully submit that many of the recitations of these claims are neither disclosed nor suggested by Banerjee. For example, independent Claim 16 recites:

A method of **generating demographic data for residents of a residence for use in selecting video content for presentation to the residents**, comprising:  
collecting information on activity schedules of the residents of the household;  
analyzing the activities reflected in the collected information; and  
**selecting video content for presentation to the residents on a television based on the analysis of the collected information.**

Independent Claim 52 contains corresponding system recitations. Applicants respectfully submit that at least the highlighted recitations of Claim 16 are neither disclosed nor suggested by Banerjee for at least the reasons discussed herein.

The Office Action points to paragraphs 17 and 35 of Banerjee as teaching all the recitations of Claim 16. *See* Office Action, page 4. The cited portions of Banerjee state:

[0017] Finally, the invention provides an advertisement provider computer for selecting advertisements to be transferred via the internet, comprising an advertising module executable at the advertisement provider computer, wherein the advertising module is configured to select an advertisement **based on consumer activity within a given environment and configured to transfer the advertisement to the consumer.** The advertising module may be further configured to accept a consumer event code from the consumer. Further, the advertising module may be further configured to accept a content provider information, wherein the content provider information comprises **content provider demographic information, and wherein the advertisement is selected on the basis of consumer activity and one or more additional criteria selected from the group consisting of consumer demographic information and content provider demographic information.** The advertisement provider computer may further include an advertisement database configured to store advertisement information....

[0035] Optionally, the advertisement provider's computer may also store demographic information about the consumer, and send custom-selected advertisements to the consumer based at least in part on the consumer's demographic profile. **For example, a consumer with a demographic profile indicating an interest in farming might be sent selected advertisements for farm products by the advertisement provider. It is also possible for customer responses to the advertisements and requests for more information about the advertised goods or services to be monitored.**

Banerjee, paragraphs 17 and 35 (emphasis added). In other words, Banerjee discusses using consumer activities and/or demographic data to tailor advertisements to a consumer.

Applicants do not claim that tailoring advertisements to a user is new. However, Claim 16 recites "generating demographic data...for use in selecting video content for presentation to the residents." Nothing in Banerjee discusses generating demographic data, Banerjee merely discusses using demographic data provided by the consumer. Furthermore, Claim 16 recites

"collecting information **on activity schedules of the residents** of the household." Nothing in Banerjee discusses activity schedules associated with the residents of a household. Claim 16 further recites "analyzing the activities reflected in the collected information" and "selecting video content for presentation to the residents on a television based on the analysis of the collected information." Similarly, these teachings are lacking in Banerjee. Accordingly, Applicants respectfully submit that independent Claim 16 and the claims that depend therefrom are patentable over Banerjee for at least the reasons discussed herein.

Independent Claim 52 contains corresponding system recitations to the recitations of independent Claim 16. Accordingly, Applicants respectfully submit that independent Claim 52 is patentable over Banerjee for at least the reasons discussed above with respect to independent Claim 16.

Independent Claim 23 recites:

A method of **determining a user of a video display device**, comprising:  
collecting information on activity schedules of the residents of the residence;  
and  
**identifying at least one of the residents of the residence as the user of the video display device based on the collected information.**

Independent Claim 53 contains corresponding system recitations. Applicants respectfully submit that at least the highlighted recitations of Claim 23 are neither disclosed nor suggested by Banerjee for at least the reasons discussed herein.

The Office Action points to paragraphs 36, 67 and 52 of Banerjee as providing all of the teachings of independent Claim 23. See Office Action, page 6. As discussed in, for example, cited paragraph 36 of Banerjee, the user "registers" and is provided a "unique member code." Thus, there is no need for Banerjee to "determine a user of a video display device" as recited in Claim 23 of the present application because the user in Banerjee identifies himself/herself. Accordingly, Applicants respectfully submit independent Claim 23 and the claims that depend therefrom are patentable over Banerjee for at least the reasons discussed herein.

Independent Claim 53 contains corresponding system recitations to the recitations of independent Claim 23. Accordingly, independent Claim 53 is patentable over Banerjee for at least the reasons discussed above with respect to independent Claim 23.

C. Claims 30, 38, 39 and 54 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 7,085,747 to Schaffer (hereinafter "Schaffer"). *See* Office Action, page 7. Applicants respectfully submit that many of the recitations of these claims are neither disclosed nor suggested by Schaffer. For example, Independent Claim 30 recites:

A method of controlling components in a home management system, comprising:  
**maintaining a central repository of residence information for use by more than one component of the home management system; and**  
**determining an action to control a component of the home management system based on an analysis of residence information maintained in the central repository.**

Independent Claim 54 contains corresponding system recitations. Applicants respectfully submit that at least the highlighted recitations of independent Claim 30 are neither disclosed nor suggested by Schaffer.

The Office Action points to column 7, lines 10-14 and column 9, lines 9-11 and 24-30 as teachings all the recitations of independent Claim 30. *See* Office Action, page 7. The cited portions of Schaffer state:

...The personal schedule module either receives personal scheduling data (of correlations between user scheduling preferences and events) directly input by the user or detects and records correlations between user actions, such as turning on and off the TV set, and media programming events...

...The Personal Schedule Module 910 contains the personal schedule data of the user, which is used by the Personal Schedule Modification System 920 to modify the Fuzzy-Now Recommendation Functions 870 in order to create Final Recommendation Functions 930...

...Personal Schedule Module may use some of the functionality of the 3-way system to monitor user 300, or to generate and update the personal schedule. User 300 is monitored by sensors directly connected to the media presentation system and/or placed separately from the media presentation system. The events, or incidents, in the personal schedule of the user are monitored by these sensors in order either to augment or to generate the personal schedule...

*See* Schaffer, column 7, lines 10-14 and column 9, lines 9-11 and 24-30. The cited portions of Schaffer discuss the use of a user's personal schedule to fine tune the "final recommendations" made to the user for viewing at a particular point in time. These "final

recommendations" can be based partially on information contained in the personal schedule module 910. *See also*, Schaffer, Figure 9 and related text. In stark contrast, Claim 30 recites "maintaining a central repository of residence information for use by more than one component of the home management system and determining an action to control a component of the home management system based on an analysis of residence information maintained in the central repository." Nothing in the cited portion of Schaffer discloses or suggests more than one component (TV) as recited in Claim 30 or a central repository as recited in Claim 30. Accordingly, since anticipation requires that there be no difference between the cited reference and the recitations of the claims, Applicants respectfully submit that independent Claim 30 and the claims that depend therefrom are patentable over Schaffer for at least the reasons discussed herein.

Independent Claim 54 contains corresponding system recitations to the recitations of independent Claim 23. Accordingly, independent Claim 54 is patentable over Schaffer for at least the reasons discussed above with respect to independent Claim 30.

### **The Section 103 Rejections**

A. Claims 1-2, 4-8, 24, 29 and 50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schaffer in view of United States Patent Publication No. 2002/0083439 to Eldering (hereinafter "Eldering"). *See* Office Action, page 8. Applicants respectfully submit that many of the recitations of these claims are neither disclosed nor suggested by the cited combination. For example, Claim 1 recites:

A method of controlling a component of a home management system at a residence, comprising  
**determining resident activities of a resident of the residence; and**  
**controlling the component based on the determined resident activities of the resident, wherein controlling the component comprises:**  
**selecting a video insertion to replace a commercial advertising portion of a video stream based on the determined activities of the resident;**  
**detecting a commercial advertising portion of the video stream; and**  
**replacing the detected commercial advertising portion of the video stream with the selected video insertion so as to provide a composite video stream containing primary content portions and the selected video insertion.**

Independent Claim 50 includes corresponding system recitations to the highlighted recitations of independent Claim 1. Applicants respectfully submit that at least the highlighted

recitations of Claim 1 are patentable over the cited combination for at least the reasons discussed herein.

The Office Action admits that Schaffer fails to disclose the highlighted recitations of independent Claim 1. *See* Office Action, page 9. However, the office Action points to Eldering as providing the missing teachings. *See* Office Action, page 9. In particular, the Office Action points to paragraph 63 of Eldering as providing the missing teachings (*See* Office Action, page 9). The cited portion of Eldering states:

[0063] Referring to FIG. 4, one simple example of **rescheduling of ads** in an exemplary queue according to an embodiment of the present invention will now be described. For this example only, assume that the scheduler 312 has been **configured to reschedule the ads** upon detection of certain channel changes and that all avails are of the same size. As shown in FIG. 4, the current viewer is watching Sports Channel (channel 5) on cable TV, which includes the next avail labeled "Avail #1." A queue 313, which may be controlled by the scheduler 312, has an ordered list of **ARLs corresponding to the ads (i.e., Ford Truck ad, Home Depot ad, Gold Gym ad, etc.) to be inserted into the upcoming avails in the program streams**. When the time comes to **insert the advertisement** into Avail #1, the Ford ad, which is at the top of the queue 313, will be inserted into Avail #1. However, before this occurs, the current viewer changes the channel to Romance Channel (channel 7) at time X (e.g., 3:02 PM), which includes the commercial break "Avail #2." At this time, the scheduler 312 determines if **rescheduling of ads** in the queue 313 is appropriate and **reschedules the ads** in the queue 313 as discussed above. In this example, **the ads** which may be more appropriate for showing in Romance Channel (e.g., Macy's ad, DeBeers ad, Ford Taurus ad, etc.) have been selected and placed at the top portion of the queue 313. According to the current ad schedule, **the Macy's ad is the next ad to be inserted into Avail #2. In this manner, the rescheduling of ads may occur continuously so that ads that are most appropriate for the current viewer are inserted and played.**

*See* Eldering, paragraph 63 (emphasis added). Thus, Eldering discusses a scheduler 312 that is configured to schedule advertisements to be shown in the next available advertisement slot based on what the user is currently watching on the television, for example, sports or the romance channel. Thus, the selection of advertisements to be inserted may be based on television programming viewed by the user. *See* Eldering, paragraph 63.

In stark contrast, Shaffer discusses using an electronic programming guide (EPG) and a user's schedule to suggest a list of suggested programs to be viewed by a user during a particular time period. Thus, Shaffer uses a single user's schedule to provide a list of recommended programs for the user to watch when the user is available. Accordingly,



Applicants respectfully submit that the combination of Eldering and Schaffer would not be obvious to one of skill in the art as suggested in the Office Action without using Applicants' disclosure as a road map. In particular, as discussed above, Schaffer discusses using the personal schedule of a single user to modify the recommendation functions of media events. *See* Schaffer, Abstract. Eldering discusses scheduling advertisements to be inserted in advertising slots. The Office Action states that it would be obvious to combine these references "in order to add selection and replacement of video insertion to the system of Schaffer." *See* Office Action, page 9. However, Schaffer merely discusses new inputs to a fuzzy-now function that may allow a list of recommended programs to be tailored to a user when the user is available to watch them. Nothing in Schaffer even discusses replacement of any portion of any of the media presented. Accordingly, Applicants respectfully submit that nothing in the recommendation patent of Schaffer or in the advertisement insertion document of Eldering would make the combination of these two references obvious. Thus, it is clear that Applicants' disclosure was used a road map to combine these documents, which is clearly improper. Accordingly, Applicants respectfully submit that amended Claim 1 and the claims that depend therefrom are patentable over the cited combination for at least these reasons.

Independent Claim 50 contains corresponding system recitations to the recitations of independent Claim 1. Accordingly, Applicants respectfully submit that independent Claim 50 is patentable over the cited combination for at least the reasons discussed above with respect to independent Claim 1.

Applicants note that Claims 32, 33, 36 and 37 are not specifically rejected in view of Schaffer and Eldering, however, these claims are discussed on pages 12-14 of the present Office Action. Accordingly, Applicants submit that these claims are patentable at least per the patentability of the independent base claims from which they depend.

B. Claims 40-47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schaffer in view of United States Patent Publication No. 2003/0135853 to Goldman (hereinafter "Goldman"). *See* Office Action, page 15. Applicants respectfully submit that many of these claims are neither disclosed nor suggested by the cited combination. For example, Independent Claim 40 recites:

A home management system, comprising:  
**a central repository of residence information;**  
**a family information manager configured to provide access to the central repository of residence information;** and  
**a plurality of home management application programs configured to retrieve information from and/or store information in the central repository.**

Applicants respectfully submit that nothing in the cited combination discloses or suggests at least the highlighted recitations of independent Claim 40 for at least the reasons discussed herein.

In particular, the Office Action points to Schaffer as teaching all the recitations of Claim 40, except "providing access to the central repository of residence information." *See* Office Action, page 15. However, the Office Action points to Goldman as providing the missing teachings. *See* Office Action, page 15. Goldman discusses selecting and inserting advertisements **in an information document** displayed to a user, for example, on a web page. The selection may be based on television programming viewed by the user. *See* Goldman, Abstract. The cited portion of Goldman at paragraph 32 discusses a modem pool and the functions thereof and, discusses nothing about a family information manager that is configured to provide access to the central repository of residence information as recited in Claim 40. Accordingly, Applicants respectfully submit that Goldman does not provide the teachings missing from Schaffer and, therefore, Claim 40 and the claims that depend therefrom are patentable over the cited combination for at least these reasons.

Furthermore, in stark contrast to Goldman, Schaffer discusses using the personal schedule of a single user to modify the recommendation functions of media events. *See* Schaffer, Abstract. The Office Action states that it would be obvious to combine these references "to ensure ads are customized for the particular use." *See* Office Action, page 15. However, Applicants respectfully submit that nothing in the recommendation patent of Schaffer or in the advertisement insertion document of Goldman would make the combination of these two references obvious. Furthermore, even if combined, the combination does not teach the recitations of Claim 40. Thus, it is clear that Applicants' disclosure was used a road map to combine these documents, which is clearly improper. Accordingly, Applicants respectfully submit that Claim 40 and the claims that depend therefrom are patentable over the cited combination for at least these additional reasons.

C. Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lord in view of United States Patent No. 6,097,441 to Allport (hereinafter "Allport"). *See* Office Action, page 18. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claim 11 for at least these reasons.

D. Claims 12 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lord in view of Banerjee. *See* Office Action, page 18. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claims 12 and 14 for at least these reasons.

E. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lord in view of Banerjee and further view of Schaffer. *See* Office Action, page 19. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claim 13 for at least these reasons.

F. Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Banerjee in view of Schaffer. *See* Office Action, page 20. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claim 17 for at least these reasons.

G. Claim 31 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schaffer in view of Banerjee. *See* Office Action, page 21. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claim 31 for at least these reasons.

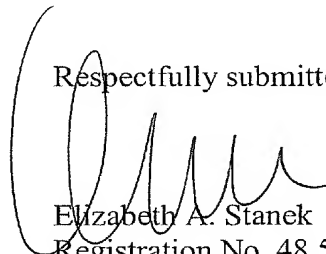
F. Claims 34 and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schaffer in view of Eldering and in further view of Banerjee. *See* Office Action, page 21. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claims 34 and 35 for at least these reasons.

G. Claims 48 and 49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schaffer in view of Examiner's Official Notice. *See* Office Action, page 23. The dependent claims are patentable at least per the patentability of the independent base claims from which they depend. Accordingly, Applicants respectfully request withdrawal of the rejections with respect to dependent Claims 48 and 49 for at least these reasons.

#### CONCLUSION

As all of the claims are now in condition for allowance, Applicants respectfully request allowance of the claims and passing of the application to issue in due course. Applicants urge the Examiner to contact Applicants' undersigned representative at (919) 854-1400 to resolve any remaining formal issues.

Respectfully submitted,



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In re: John Andrew Sotak et al.

Serial No.: 10/714,413

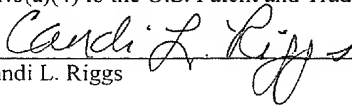
Filed: November 14, 2003

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**CERTIFICATION OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on February 23, 2009.

  
Candi L. Riggs